Pontoon Concrete Pour Facts

- Pontoon concrete was first poured on Friday, April 28, 2006.
- The new Hood Canal Bridge is comprised of 17 pontoons. Fourteen pontoons will be built at the Concrete Technology graving dock. Three pontoons from the 1980s will be retrofitted.
- WSDOT is currently constructing three draw span pontoons, named PA, PB and Q.
- It will take approximately 140 yards of concrete to create the first floor section of pontoon PA. That's enough concrete to fill 1,120 wheelbarrows.
- If 140 yards of concrete were converted to coffee, you'd have to fill 452,422 8 oz. cups.
- During the five hour pour, 14 cement trucks have approximately 21 minutes each to drive into place, pour the concrete and move out of the way for the next truck.
- 21 concrete pours are required to finish pontoon PA: four floor pours, 15 wall pours and two top pours.
- To complete all three draw span pontoons (PA, PB and Q) 56 concrete pours are needed:
    - 21 pours for PA
    - 21 pours for PB
    - 14 pours for Q
- All together, 7,952 cubic yards of concrete make up pontoons PA, PB and Q. That's enough to cover a football field with 15 inches of concrete.
    - 2,660 cubic yards for pontoon PA
    - 2,660 cubic yards for pontoon PB
    - 2,632 cubic yards for pontoon Q

Bridge Facts
Bridge Length: 1.5 miles
Original Bridge: Opened Aug. 12, 1961
West-half sunk: Feb. 13, 1979
West-half replaced: October 1982
Center draw-span opening: 600 feet
Water depth below the bridge: 80 to 340 feet
Tidal swings up to: 16.5 feet

- Longest floating bridge over salt water
- Second floating bridge constructed in WSDOT's system
- When winds are 40 mph or more for 15 minutes, the draw span is opened

East-half Replacement and West-half Retrofit Project
Start Date: August 2002
Completion Date: 2010
Project Budget: $471 million
Major Work Items:

- Replace the east-half floating portion of the bridge
- Replace the east and west approach spans
- Replace the east and west transition spans
- Widen the west-half to allow for continuous eight-foot shoulders across the entire length of the bridge -- matching the new east-half
- Upgrade electrical systems on the west-half

Historical Facts:

- Construction began January 1958 and was opened to traffic on August 12, 1961.
- Original bridge construction cost $26.6 million.
- The bridge was named in honor of William A. Bugge by the Washington Highway Commission at the request of the Washington State Senate on July 12, 1977. William A. Bugge was director of the Department of Highways from 1949 to 1963, and was a leader in the planning and construction of the bridge.
- The pontoons for the floating bridge were constructed at a graving dock along the Duwamish River in Seattle and towed by tugs to the bridge site.
- The bridge's west half failed and sank on February 13, 1979 during a storm carrying wind gusts of 120 mph and sustained winds of 85 miles per hour. The west half re-opened in October 1982.
- Replacement of the west half and rehabilitation of the east half cost $143 million.
- Average daily traffic across Hood Canal Bridge is approximately 14,000 vehicles. Peak volumes reach 20,000 vehicles on summer weekends.
- The water depth below the floating bridge pontoons ranges from 80 to 340 feet. In its marine environment, the bridge is exposed to tide swings of 16.5 feet.
- During inclement weather, when winds of 40 mph or more are sustained for 15 minutes, the draw span is retracted (closing the bridge to vehicle traffic).

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